

**Ex 1250**

## Static Eliminator Bar

*The EX1250 Bar is a high performance static eliminator with ATEX certification for use in hazardous areas.*

*The EX1250 is suitable for Zone 1 and Zone 2 hazardous areas. Please see certification details on page 2.*

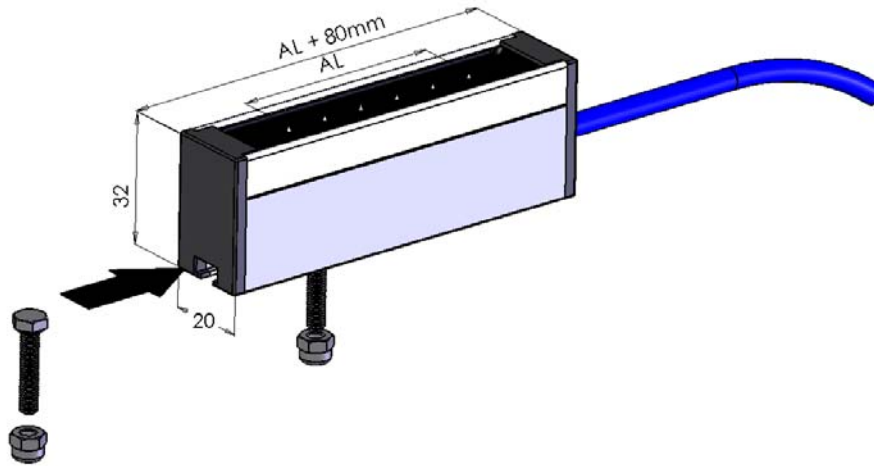


### Benefits and Advantages

- The EX1250 is part the Fraser 1250 family of static eliminators, which offer market-leading reliability and performance
- The EX1250 has a resistively coupled design for neutralising high charges at fast speeds.
- Maximum ionisation performance in a hazardous area.
- Stay-sharp etched emitters for better long term performance. Life 5 years +. Non-infectious.
- Emitters at 15mm pitch provide more ionisation and so better neutralisation.
- Robust construction, but compact and easy to install. Swivel screw-in cable connectors.
- Operating distance up to 150mm. Best distance for high speeds and high charges 25 - 50mm.
- Washable and suitable for food, medical and pharmaceutical applications.
- Optional remote function monitoring showing status of high voltage and whether Bars require cleaning.
- All electronic components are fully encapsulated for maximum reliability.

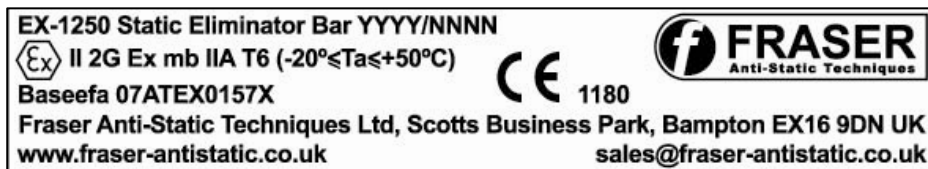
<b>Length:</b>	Any size from 100mm to 6000mm. Active length is 60mm less than overall length.
<b>Mounting:</b>	M4 x 20mm hexagon studs slide in slot for mounting.
<b>Cable:</b>	3m of armoured cable is standard, longer lengths can be specified at time of order. Please check that 3m is sufficient - the Power Unit must be outside the hazardous area.
<b>Safety:</b>	High resistance in emitters for shockless operation.
<b>Power Unit:</b>	HP EX Power Unit, which must be positioned outside of the hazardous area.
<b>Options:</b>	Airboost – see 1250 AB. Combination with Passive Discharger for very high speeds/charges.
<b>ATEX:</b>	See page 2 - overleaf





## ATEX Certification.

The details of the ATEX certification for the EX1250 Bar are:



### Explanation

- II Industrial equipments.
- 2 Equipment category: high protection. Suitable for zones 1 and 2.
- G Equipment used in potentially explosive atmospheres caused by presence of explosive gas, vapour and mist.
- Ex Explosion protection.
- mb Encapsulation.
- IIA Gas Group.
- T6 (-20 °C ≤ Ta ≤ +50°C) Temperature class. Maximum Surface Temperature T6 = 85°C.

## EX HP Power Unit

The EX1250 is more powerful than competitive systems and so uses more current. The permissible current for the ATEX certification is 5mA. This means that the maximum load is 15m of combined Bar and Cable.

For example:

- 2 Bars of 1m length each with 6.5m of cable.
- 3 Bars of 1m length each with 4m cable.
- 4 Bars of 0.75m length each with 3m cable.

Exceeding this load will negate the ATEX certification.



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No. 961026

<b>Input:</b>	115V or 230V 50/60Hz. Please specify. Fuse: 1A (115V) 500mA (230V) Illuminated mains switch. 20VA load. 3m mains cable (longer can be specified).
<b>Output:</b>	5.5kV current limited to 5mA. Connectors for up to 4 EX1250 Bars.
<b>Weight:</b>	3kg.
<b>Dimensions:</b>	170mm x 138mm x 85mm high.
<b>Construction:</b>	IP54.

## Remote Function Monitor for Power Unit (Optional)

On every power unit the operational status is generally shown by the ON/OFF green switch. However this does not show that the high voltage is present.

The optional Remote Function Monitor (RFM) measures the high voltage output and indicates if there is a fault which results in no ionisation. The fault could be:

- A) in the mains supply
- B) a short in the bar or cable
- C) a fault in the power unit
- D) bars require cleaning

If there is a fault in the EX1250 Bar the Power Unit will shut down for safety reasons - it is current limited to 5mA.

The electronic circuitry for the RFM is on a PCB mounted inside the power unit. It does not need any additional power source.

The connector on the power unit shown in the photo below will give a potential free signal which can go to a remote location such an alarm or PLC on the machine.



Remote Function Monitor Connector

The Remote Function Indicator is powered internally. The relay does not require an additional source of power, such as a 12V or 24V supply, which is required by competitive equipment.

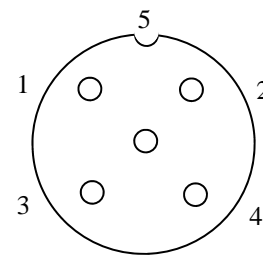
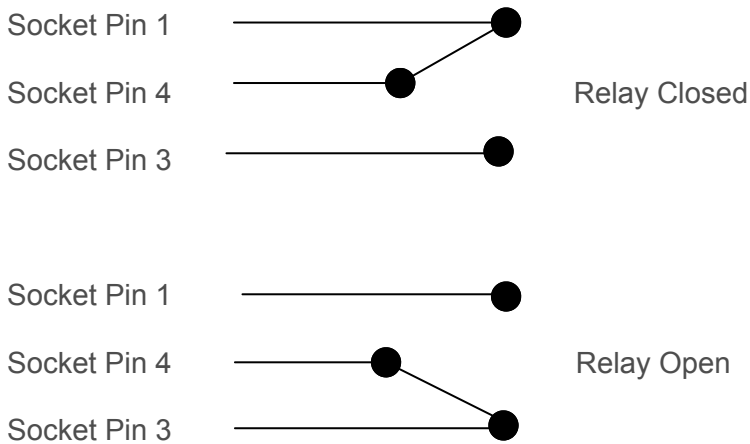
## Remote Function Indicator: Operation

Mains OFF:	relay CLOSED
Mains ON and HV GOOD:	relay OPEN
Mains ON and HV FAULT	relay CLOSED

### Relay Specification

Isolation (contacts to coil)	4kV (impulse test)
Rated load with 230V AC:	250VA
Breaking capacity DC:	3A at 30V, 0.35A at 110V, 0.2A at 220V
Minimum switching load:	5mA at 10V

### Operation of the Relay



Pin Assignment

Cables with connector for this socket are available on request. There are two options:

1. Connector: Lumberg RSC5/7
2. Connector with 5m cable: Lumberg RST5/228 5m

Please note that the power unit will be IP54 only in locked position with its proper counterparts.

Possibility of remote monitor the mains is available on request.